

**REMARKS**

Claims 1-36 are pending in the application.

Claims 1-4, 9, 15, 17-23, 25-31, 33, 34 and 36 have been rejected.

Claims 5-8, 16, 24, 32 and 35 have been objected to.

Reconsideration of the Claims is respectfully requested.

I. **ALLOWABLE CLAIMS**

The Applicant thanks the Examiner for the indication that Claims 5-8, 16, 24, 32, and 35 would be allowable if rewritten in independent form to incorporate the elements of their respective base claims and any intervening claims. Because the Applicant believes that the remaining claims in this application are patentable, the Applicant has not rewritten these claims in independent form, at this time.

II. **REJECTIONS UNDER 35 U.S.C. § 103**

Claims 1, 3-4, 13-15, 17-19, 21-23, 25-27, 29-31, 33-34 and 36 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Alexander, et al. (US 5,909,564) in view of Derby, et al. (US 5,483,522) and Michels, (U.S. Patent Application Publication 2003/0058864). Claims 2 and 9-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Alexander in view of Derby and Michels, as applied to claim 1, and further view of Daruwalla, et al. (US 6,128,296). Claims 11-12, 20, and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Alexander in view

of Derby and Michels, as applied to claim 1, and further in view of Akaboshi, et al. (US 5,621,908).

These rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach

or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

Alexander recites an Ethernet switch that includes multiple Medium Access Control (MAC) interface logic circuits coupled to multiple output ports. (Abstract). The Ethernet switch also includes a switch central processor. (Abstract). The central processor executes firmware to provide various functions in the Ethernet switch, such as firmware for reading the contents of counters, classifying frame lengths, and performing counter updates for remote monitoring. (Col. 2, Lines 6-10). Alexander recites that multiple Ethernet switches can be coupled together and communicate with one another, such as by exchanging “information regarding their address tables.” (Col. 10, Lines 44-47).

With respect to Claim 1, Alexander simply recites an Ethernet switch that implements various functions in firmware instead of hardware and that multiple Ethernet switches may communicate with one another. As apparently conceded by the Office Action, Alexander does not disclose, teach, or suggest “retrieving” a “list of locally owned address information” from “each of [a plurality of] distributed address databases,” where each address database includes “locally owned address entries” and “remotely owned address entries” as recited in Claim 1.

Though Alexander recites that the Ethernet switches may exchange “information regarding their address tables,” there is no recitation that each address table includes “locally owned address entries” and “remotely owned address entries.” In particular, Alexander fails to specify what information is exchanged between the Ethernet switches “regarding their address tables.”

The Office Action has not shown that the Ethernet switches of Alexander each includes an address database having “locally owned address entries” and “remotely owned address entries” as recited in Claim 1. The mere fact that the Ethernet switches exchange information “regarding their address tables” does not establish or describe that each address table has “locally owned address entries” and “remotely owned address entries.” In particular, the Applicant notes that Alexander recites that the Ethernet switches exchange information “regarding” their address tables, not information “from” their address tables or information “contained in” their address tables. Such “information” could, arguably, be information simply to inform the other switches as to the size of its address table or the time at which the address table was last updated - it is unclear.

Alexander is also cited as disclosing “reporting information” (citing Col. 10, lines 44-47). Applicant’s Claim 1 recites “reporting the sorted address information” that is sorted according to a predetermined sorting scheme. Applicant notes that Col. 10, lines 44-47 of Alexander only recite the Ethernet switches exchange information “regarding” their address tables, not information “from” their address tables or information “contained in” their address tables. The Office Action thus argues that Alexander discloses the element/feature of “reporting information”. However, this is insufficient to disclose, teach or suggest Applicant’s “reporting the sorted address information” (which is locally owned address information from each of the distributed address databases). Moreover Alexander further recites that the Ethernet switches “notify each other of the presence of Ethernet frames that must be transferred between devices over the expansion bus 22.” (Col. 10, lines 47-50) which appears unrelated to sorted address information.

The Office Action cites Derby as disclosing “several distributed nodes that periodically exchange locally owned and remotely owned address information in order to provide proper network routing for data packets.” See, Office Action, page 3. For ease of reference, Applicant provides below the text of Col. 5, lines 30-67, as cited by the Office Action as disclosing the exchange of “locally owned and remotely owned address information”:

In FIG. 2 there is shown a general block diagram of a typical subnode such as is found in the network nodes 11 of FIG. 1. The subnode of FIG. 2 comprises a high speed packet switching bus 23 onto which packets arriving at the subnode are entered. Such packets arrive from external nodes over links via transmission adapters 24, 25, . . . , 26, or originate in internal node user applications via application adapters 20, 21, . . . , 22, or arrive from other subnodes within the node via intranode adapters 14, 15 . . . 16. Packets might also be placed on the bus by network control function adapters. All adapters in a subnode examine packet headers of packets on bus 23. Using information in the packet header, each of the adapters 20-22, 24-26, and 14-16 determine which packets placed on bus 23 have its address and are to be routed to its user application or link, as the case may be, attached to the adapter. The adapters 20-22, 24-26, and 14-16 may include queuing circuits for queuing packets prior to or subsequent to switching on bus 23. The control point 27 calculates optimum routes through the network of FIG. 1 so as to minimize the amount of network resources used to complete a communication path.

The control point 27 of FIG. 2 may comprise discrete digital circuitry or may preferably comprise properly programmed digital computer circuits. Such a programmed computer can be used to generate headers for packets originating at user applications in the node of which the subnode of FIG. 2 is a part. Finally, the databases necessary to support the calculation of optimum routes for packets originating at the node are also included in the control point. Such network topology databases include all the necessary information about the nodes, subnodes, and intranode links and transmission links connected to the subnodes which are to be used for routing. Moreover, such topology information is updated when new links are activated or new nodes or subnodes are added to the network. Such network topology information is exchanged with all other nodes to provide the necessary up-to-date information needed for route calculation.

Col. 5, lines 30-67. (emphasis added).

Though Derby recites the above language, there is no reference to address tables that include “locally owned address entries” and “remotely owned address entries.” In particular, Derby merely recites that a network topology database exists, and that such database is a topology database that includes “all the necessary information” about the nodes, subnodes and intranode links and transmission links. What constitutes this “necessary information” is not explained in Derby. Moreover, it appears that such information is limited to topology information, and may be “link information required for path selection such as the bandwidth capacity and the total bandwidth currently allocated for ongoing connections.” See, Col. 2, lines 43-51. Applicant respectfully submits that this does not establish or describe that each address table has “locally owned address entries” and “remotely owned address entries” and sorting of a list of locally owned address entries received from a distributed address database.

For these reasons, the Office Action has failed to establish that the proposed Alexander-Derby combination discloses, teaches or suggests those elements/features as asserted in the Office Action.

The Office Action also cites Michels as allegedly showing that network addresses may be sorted. The Office Action cites no portion of Michels as disclosing, teaching, or suggesting the use of an address database having “locally owned address entries” and “remotely owned address entries” and sorting the retrieved list of locally owned address information (received from a distributed database) as recited in Claim 1.

Accordingly, the Applicant respectfully requests withdrawal of the § 103(a) rejection of Claims 1, 3-4, 13-15, 17-19, 21-23, 25-27, 29-31, 33-34 and 36, as the Alexander-Derby and Alexander-Derby-Michels combinations fails to establish a prima facie case of obviousness.

With respect to the rejections of dependent Claims 2, 9-12, 20 and 28 based upon a additional references, such rejections suffer from the same infirmities based upon the reasoning set forth above.

### III. CONCLUSION

As a result of the foregoing, the Applicant asserts that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

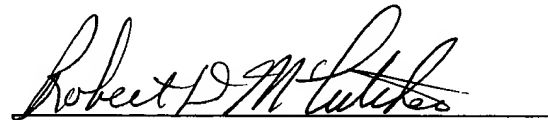
If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *rmccutcheon@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

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